

09/830966

JC08 Rec'd PCT/PTO 03 MAY 2001

ABSTRACT OF THE DISCLOSURE

Noise reduction arrangement including: a plurality of actuators (3(n)) for generating secondary noise (p_s) to reduce primary noise (p_p) and being located in a first surface; a plurality of errors sensors (2(m)) located in a second surface parallel to the first surface for sensing a total amount of noise resulting from the primary noise after being reduced by the secondary noise; a plurality of control elements (5(i)) for controlling the actuators (3(n)) based on the sensor outputs, wherein the distance (d) between the first and second surfaces is such that reduction in power RP of the total amount of noise relative to the primary noise within a predetermined frequency band is within the following range: $0.9 \times RP_{max} \leq RP \leq RP_{max}$ in which RP_{max} is the maximum obtainable reduction in power of the total amount of noise relative to the primary noise, both RP and RP_{max} being expressed in decibel.